

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
17 February 2005 (17.02.2005)

PCT

(10) International Publication Number
WO 2005/014812 A3

(51) International Patent Classification⁷: C12N 15/11,
C07H 21/00

(21) International Application Number:
PCT/EP2004/008986

(22) International Filing Date: 11 August 2004 (11.08.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
03018285.1 12 August 2003 (12.08.2003) EP

(71) Applicant (for all designated States except US): AN-
TISENSE PHARMA GMBH [DE/DE]; Josef-En-
gert-Strasse 9, 93053 Regensburg (DE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): SCHLINGEN-
SIEPEN, Karl-Hermann [DE/DE]; Schubertstrasse 5,
93093 Donaustauf (DE). SCHLINGENSIEPEN, Reimar
[DE/DE]; Auf der Platte 4, 93051 Regensburg (DE).

(74) Agents: SCHREIBER, Christoph et al.; Postfach 10 22
41, 50462 Köln (DE).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,

AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- before the expiration of the time limit for amending the
claims and to be republished in the event of receipt of
amendments

(88) Date of publication of the international search report:
9 June 2005

For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.

WO 2005/014812 A3

(54) Title: AN ANTISENSE OLIGONUCLEOTIDE TO INHIBIT MELANOMA INHIBITORY ACTIVITY, MIA

(57) Abstract: An antisense oligonucleotide selected from the group of - the sequence 5'- TTG CAT AAA CCC AAG GAG - 3' and modifications thereof - a fragment having at least 8 nucleotides of the sequence 5'- TTG CAT AAA CCC AAG GAG - 3' and modifications thereof.

INTERNATIONAL SEARCH REPORT

International Application No

PCT/EP2004/008986

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N15/11 C07H21/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C12N C07H

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, CHEM ABS Data, BIOSIS, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 01/68122 A (APFEL RAINER ;BIOGNOSTIK GES (DE); BOGDHNS ULRICH (DE); BRYSCH WOL) 20 September 2001 (2001-09-20) cited in the application * Sequences ID No. 1-8 on page 13 * * Sequences ID No. 10-39 on page 5 *claims -----	1-15
X	WO 99/65928 A (SHANKARA SRINIVAS ;GENZYME CORP (US); ROBERTS BRUCE L (US)) 23 December 1999 (1999-12-23) *SEQ ID NO:5894 on page 213* page 56, line 19 - page 57, line 8 -----	1-6
A	WO 99/50411 A (BUETTNER REINHARD ;SEEBER STEFAN (DE); RUEGER RUEDIGER (DE); BOSSE) 7 October 1999 (1999-10-07) claims *SEQ ID NO:1* ----- -/--	1-15

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

* Special categories of cited documents :

A document defining the general state of the art which is not considered to be of particular relevance

E earlier document but published on or after the international filing date

L document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

O document referring to an oral disclosure, use, exhibition or other means

P document published prior to the international filing date but later than the priority date claimed

T later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

X document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

Y document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.

G document member of the same patent family

Date of the actual completion of the international search

14 March 2005

Date of mailing of the international search report

29/03/2005

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2
NL - 2280 HV Rijswijk
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,
Fax: (+31-70) 340-3016

Authorized officer

Gohlke, P

INTERNATIONAL SEARCH REPORT

International Application No
PCT/EP2004/008986

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>GOLOB ET AL.: "Characterization of a Transcription Factor Binding Site, Specifically Activating MIA Transcription in Melanoma"</p> <p>J. INVEST. DERMATOL., vol. 115, 2000, pages 42-47, XP002268393</p> <p>* Sequence of HCR, page 43 lines 34-35 *</p> <p>abstract</p> <p>-----</p>	1-15

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/EP2004/008986

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
WO 0168122	A	20-09-2001	EP 1133994 A1 19-09-2001
			AU 4650101 A 24-09-2001
			CA 2403084 A1 20-09-2001
			WO 0168122 A2 20-09-2001
			EP 1263456 A2 11-12-2002
			JP 2003531830 T 28-10-2003
WO 9965928	A	23-12-1999	AU 4824199 A 05-01-2000
			AU 4825699 A 05-01-2000
			AU 5204499 A 05-01-2000
			CA 2335452 A1 23-12-1999
			EP 1086215 A2 28-03-2001
			JP 2002534056 T 15-10-2002
			WO 9965928 A2 23-12-1999
			WO 9965924 A2 23-12-1999
			WO 9966303 A2 23-12-1999
WO 9950411	A	07-10-1999	EP 0945507 A1 29-09-1999
			AU 3599199 A 18-10-1999
			WO 9950411 A2 07-10-1999